



PET RECYCLING LIGHTWEIGHT PANELS

Plates made from up to 100% PET recycling material, Gurit® Kerdyn™ Green FR 180 kg/m³



Plate formats:

Length 2,44 m
Width 1,25 m
Honeycomb lying.

Stored plate

thicknesses in mm:

10, 20, 30, 40, 50, 60, 70, 80,
100, 160

Dimensional tolerances:

Length ±5 mm
Width +0/-30 mm
Thickness ±0,5 mm

Standing combs on request

Plate formats:
Length 2,44 m
Width 1,005 m
Honeycomb standing.

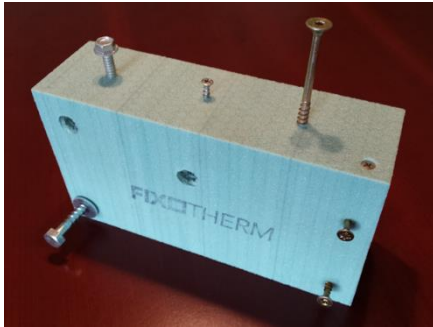
Gurit® Kerdyn™ Green FR is a new recyclable, thermoplastic functional material with very good mechanical properties, as well as excellent temperature and moisture resistance. The plate is made of up to 100% PET recycled material and can be processed with standard woodworking machines.

The benefits:

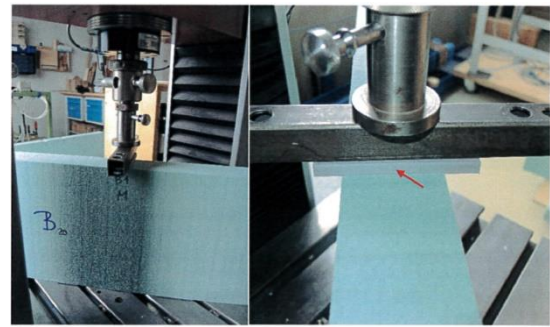
- Lightweight PET recycled sheet, Gurit® Kerdyn™ Green FR 180 kg/m³
e.g.: L=2,44 m x W=1,25 m = 3,05 m² x T=0,06 m x specific weight 180 kg/m³ = 32,94 kg a' sheet with 3,05 m²
- Easy to use and easy on personnel
- Easy to process with conventional processing machines
- Very high compressive strength
- Dimensionally stable
- High flexural strength - very resistant to breakage
- Thermal conductivity 0.0403 W/(m-K)
- Very good water vapor diffusion values
- Very good screw pull resistance
- Fire classification applies from a board thickness of 10 mm E (EN13501)
- A wide range of application options in construction and industry



FEATURES *PET recycling sheets Kerdyn Green FR180 kg/m³*



- * high flexural strength
- * very high compressive strength
- * dimensionally stable
- * easy to handle
- * very resistant to breakage
- * high temperature and chemical resistance
- * very good water diffusion values



- * very good screw extraction values
- * wide range of thicknesses
- * easily editable
- * light weight
- * diverse use of adhesives & resins
- * low resin absorption
- * moisture resistant

APPLICATIONS



- * Window sill connection profiles, FIXOTHERM
- * Floor connection profiles, under doors, BASE
- * Attica parapet borders
- * Carrier board in combination w. laminate, veneer
- * Partition wall divider wall in lightweight version
- * In yacht and ship building
- * For transportation constructions (floors, walls)
- * Filler for house entrance doors

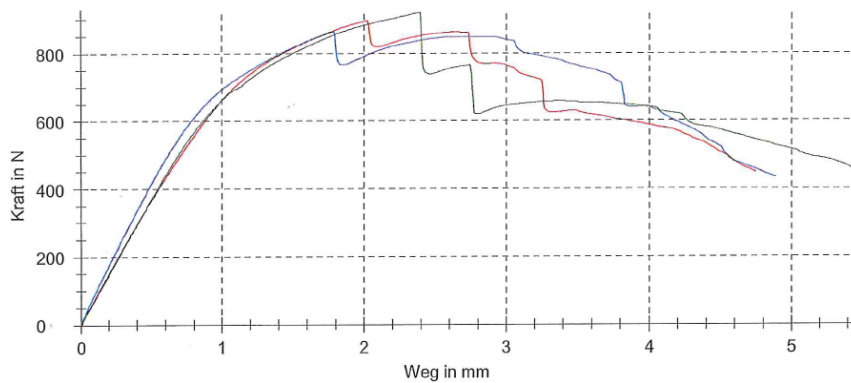
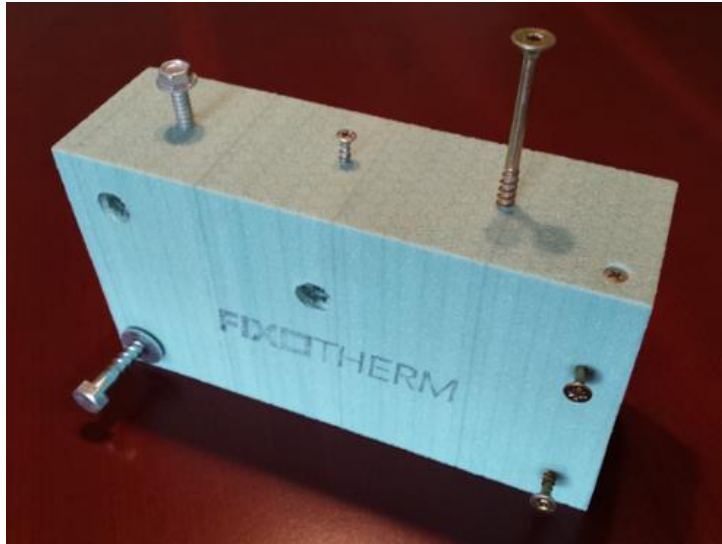
- * Support plate for plaster, tiles, in wet areas
- * Heating, refrigeration and air conditioning technology
- * Wall and floor elements for mobile container construction or mobile houses
- * Attica situations, chocks
- * outdoor furniture
- * roof substructures
- * Architecture / Civil Engineering / Foundation Plates
- * Load-bearing and constructive component for the threshold substructure of windows and doors

Please calibrate panels before laminating, veneering or coating!



Screw pull resistance

PET recycling sheets Kerdyn Green FR 180 kg/m³:



Extract values from the panel surface with screw type 4.5 x 60 mm:

Screw-in depth 15 mm 400 N according to test standard EN320 (based on).

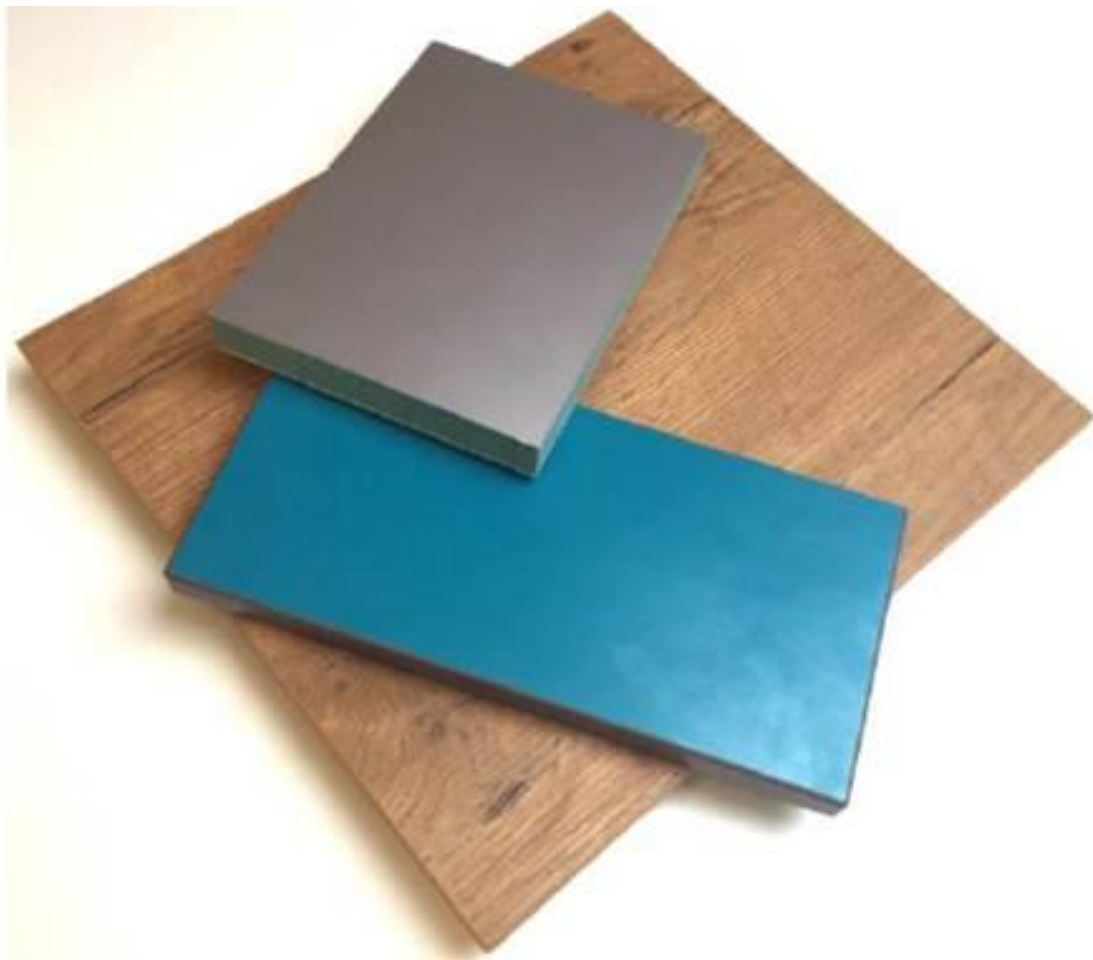
Screw-in depth 20 mm 520 N according to test standard EN320 (based on).

Screw-in depth 30 mm 830 N according to test standard EN320 (based on).

Screw-in depth 40 mm 1080 N according to test standard EN320 (based on).



Various coatings in the sandwich process:





Example as floor recess profile (BASE)

Load-bearing and structural component for the threshold substructure of windows and doors.
Made from PET recycling sheets Kerdyn Green FR 180 kg/m³:



Weight load / example:

Load on the support block = 8 kg/cm²

Support block measuring 3 x 5 cm

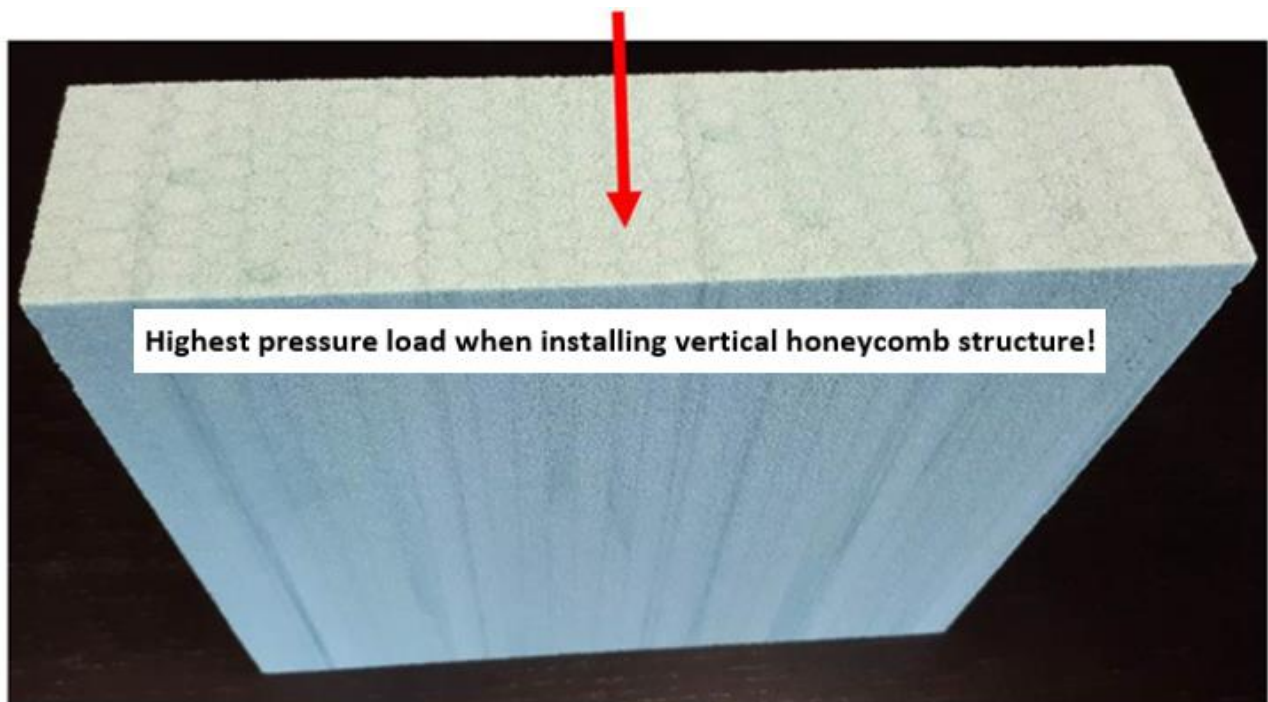
Calculation e.g.:

3 cm x 5 cm x 2 support blocks = 30 cm²

30 cm² x 8 kg/cm² = 240 kg load!

INSTALLATION - HONEYCOMB DIRECTION!

For this purpose, Holforschung Austria heated the PET recycling material to 55° C and confirmed the pressure load when the plate was warm. 55° C Simulates exposure to the sun.





PET recycling panels warehouse at FE System Fassaden GmbH



Overview of the most common plate thicknesses: "MOST WANTED"

PET recycled lightweight panels Kerdyn Green FR 180 kg/m³

- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 10 mm / 105 panels per pallet
- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 20 mm / 53 panels per pallet
- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 30 mm / 35 panels per pallet
- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 40 mm / 26 panels per pallet
- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 50 mm / 21 panels per pallet
- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 60 mm / 18 panels per pallet
- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 70 mm / 15 panels per pallet
- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 80 mm / 13 panels per pallet
- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 100 mm / 11 panels per pallet
- PET-platte with horizontal lying honeycomb L=2,44 x W=1,25 m T= 160 mm / 7 panels per pallet

There are also other PET recycling sheets in densities and qualities in 80, 115, 180, 240, 300 kg/m³ possible, which we are happy to offer on request.

E.g.: PET recycling lightweight board Kerdyn Green FR density 80 kg/m³ - lambda value 0.0270.

PET recycling lightweight board Kerdyn Green FR density 115 kg/m³ - lambda value 0.0332



From WASTE PET BOTTLES, PET RECYCLING PANELS are produced.



Gurit

PET recycled structure foam sheets.

The green solution for a wide range of applications!

Approx. 982 PET bottles are recycled, with a sheet e.g.: 1,250 x 2,440 mm S=50 mm. (density 180 kg/m³).

We clean the environment with PET recycling products.

Approx. 6,438 bottles per m³ are processed into new materials in the recycling process with a density of 180 kg/m³! Sustainability is very important to us!

For further inquiries please contact us at any time.

Meanwhile we remain

With best regards

FIXOTHERM
Fensterbank-Dichtsysteme

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Gurit

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